

SITE:	Pittsburg (PG&E)	LATITUDE:	38-02.4'
HAZARD:	Facility	LONGITUDE:	122-53.6'
VOLUME:	10,000 bbl		
DURATION:	3 days		

TRAJECTORY ANALYSIS

A spill trajectory envelope was calculated for the PG&E facility located on the south shore of Suisun Bay in Pittsburg. The trajectory analysis considered oil transport by the wind, tidal currents, and river flow, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion. Spill transport on the flood tide would be expected to transport the oil eastward from Suisun Bay approximately 5 miles from the spill location. A spill during the ebb tide would be expected to transport the oil westward across Suisun Bay approximately 5 miles from the spill location. Physical spreading of a 10,000 bbl spill would cause additional transport of approximately 3 miles after 3 days.

Wind-induced surface currents could cause additional transport of oil depending on the direction, strength, and persistence of local winds. Easterly winds could transport the oil across Suisun Bay to the Carquinez Strait. Westerly and southwesterly winds could transport the oil towards the San Joaquin and Sacramento Rivers. Transport up these rivers would be limited by seasonal river flow.

These spill trajectory envelopes represent the outer perimeter of shoreline areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current, and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in Section 202.2.